

Title (en)  
VORTEX GENERATOR-SENSOR

Publication  
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Application  
**EP 89901026 A 19881214**

Priority  
• US 13331587 A 19871216  
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Abstract (en)  
[origin: WO8905966A1] A vortex flowmeter comprises a vortex generator-sensor including an elongated cylindrical member (1) disposed across a cross section of the flow passage (4) wherein one extremity (2) of the elongated cylindrical member (1) is secured to the wall (3) of the flow passage (4), while the other extremity (7) is connected to a force receiving member (6) extending from a transducer assembly (5) by mechanical coupling (8). The vortices shed from the two opposite lateral sides of the elongated cylindrical member (1) in an alternating mode generate alternating lateral fluid dynamic force on the elongated cylindrical member (1), which in turn generates alternating electrical signal from the transducer. The velocity of the fluid flow is determined from the frequency of the alternating electrical signal and the mass flow rate of the fluid is determined from a combination of the frequency and the amplitude of the alternating electrical signal.

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**G01F 1/32**; **G01F 1/74**

IPC 8 full level  
**G01F 1/32** (2006.01); **G01F 1/708** (2006.01); **G01F 1/86** (2006.01)

CPC (source: EP US)  
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**G01F 1/708** (2013.01 - EP US); **G01F 1/86** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0049602 A1 19820414 - FISCHER & PORTER CO [US]  
• [X] US 4083240 A 19780411 - HERZL PETER J  
• [Y] GB 2135446 A 19840830 - ITT IND LTD  
• [A] US 4281553 A 19810804 - DATTA-BARUA LOHIT  
• See references of WO 8905966A1

Designated contracting state (EPC)  
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